



EDMUND G. BROWN JR.  
GOVERNOR

MATTHEW RODRIGUEZ  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

## State Water Resources Control Board

Division of Drinking Water

January 3, 2019

System No. 2600700

Greg Cook, Board President  
Sierra Business Park Owner's Association  
119 Mac Iver Street #G  
Bishop, CA 93514

### **CITATION NO. 05-13-19C-001 OPERATING A PUBLIC WATER SYSTEM WITHOUT A PERMIT**

Enclosed is Citation No. 05-13-19C-001 (hereinafter "Citation"), issued to Sierra Business Park Owner's Association (hereinafter "Sierra Business Park"), public water system. Please note that there are legally enforceable deadlines associated with this Citation.

Sierra Business Park will be billed at the State Water Resources Control Board's (hereinafter "State Water Board"), hourly rate for the time spent on issuing this Citation. California Health and Safety Code (hereinafter "CHSC"), Section 116577, provides that a public water system must reimburse the State Water Board for actual costs incurred by the State Water Board for specified enforcement actions, including but not limited to, preparing, issuing and monitoring compliance with a citation. At this time, the State Water Board has spent approximately three hours on enforcement activities associated with this violation.

Sierra Business Park will receive a bill sent from the State Water Board in August of the next fiscal year. This bill will contain fees for any enforcement time spent on the Sierra Business Park for the current fiscal year.

Any person who is aggrieved by a citation, order or decision issued under authority delegated to an officer or employee of the State Water Board under Article 8 (commencing with CHSC, Section 116625) or Article 9 (commencing with CHSC, Section 116650), of the Safe Drinking Water Act (CHSC, Division 104, Part 12, Chapter 4), may file a petition with the State Water Board for reconsideration of the citation, order or decision. Appendix 1 to the enclosed Citation contains the relevant statutory provisions for filing a petition for reconsideration (CHSC, Section 116701).

FELICIA MARCUS, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

464 W. 4th Street, #437, San Bernardino, CA 92401 | [www.waterboards.ca.gov](http://www.waterboards.ca.gov)



Petitions must be received by the State Water Board within 30 days of the issuance of the citation, order or decision by the officer or employee of the State Water Board. The date of issuance is the date when the Division of Drinking Water mails a copy of the citation, order or decision. If the 30th day falls on a Saturday, Sunday, or state holiday, the petition is due the following business day by 5:00 p.m.

Information regarding filing petitions may be found at:

[http://www.waterboards.ca.gov/drinking\\_water/programs/petitions/index.shtml](http://www.waterboards.ca.gov/drinking_water/programs/petitions/index.shtml)

If you have any questions regarding this matter, please contact Wei Chang of my staff at (909) 383-6029 or me at (909) 383-4328

Sincerely,



Eric J. Zúñiga  
District Engineer  
San Bernardino District

Enclosures

Certified Mail No. 7006 2150 0004 3940 8676

cc: Jon Drozd, REHS, Mono County Health Department, [jdrozdz@mono.ca.gov](mailto:jdrozdz@mono.ca.gov)  
Luis Molina, Director, Mono County Health Department, [lmolina@mono.ca.gov](mailto:lmolina@mono.ca.gov)

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD  
DIVISION OF DRINKING WATER

**Name of Public Water System:** Sierra Business Park Owner's Association

**Water System No:** 2600700

**Attention:** Greg Cook, Board President

119 Mac Iver Street #G

Bishop, CA 93514

**Issued:** January 3, 2019

**CITATION FOR NONCOMPLIANCE**

**CALIFORNIA HEALTH AND SAFETY CODE, SECTION 116525(a), AND  
CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTION 64001**

**OPERATING A PUBLIC WATER SYSTEM WITHOUT A PERMIT**

The California Health and Safety Code (hereinafter "CHSC"), Section 116650 authorizes the State Water Resources Control Board (hereinafter "State Water Board"), to issue a citation to a public water system when the State Water Board determines that the public water system has violated or is violating the California Safe Drinking Water Act (hereinafter "California SDWA"), (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit, or order issued or adopted thereunder.



The State Water Board, acting by and through its Division of Drinking Water (hereinafter "Division"), and the Deputy Director for the Division, hereby issues Citation No. 05-13-18C-029 (hereinafter "Citation"), pursuant to Section 116650 of the CHSC to the Sierra Business Park Owner's Association (hereinafter "Sierra Business Park"), for violation of CHSC, Section 116525(a) and California Code of Regulations, Title 22, Section 64001.

### STATEMENT OF FACTS

Sierra Business Park is classified as a non-transient non-community public water system with a population of 25, serving 15 connections.

Pursuant to Section 116525(a) of the CHSC, Sierra Business Park shall not be operated as a public water system, unless Sierra Business Park first submits an application to the Division and receives a permit as provided in this Section. California Code of Regulations, Title 22, Section 64001 states that a public water system shall submit an application for a permit pursuant to Section 116525 or Section 116550 of the Health and Safety Code.

On February 15, 2018, the Division sent a letter requesting items needed to complete a permit application. Sierra Business Park submitted a permit application page dated June 23, 2018, but as of December 21, 2018 the Division has not received any other permit application documentation.

### DETERMINATION

Sierra Business Park failed to submit required documentation for permit application and consequently violated CHSC, Section 116525(a) and California Code of Regulations, Title 22, Section 64001.



**DIRECTIVES**

Sierra Business Park is hereby directed to take the following actions:

1. Comply with the CHSC, Section 116525(a) and California Code of Regulations, Title 22, Section 64001 in the future.
2. By **March 31, 2019** submit the missing items that would deem this water supply permit application complete. The following is a list of documents needed for a permit application. A checklist and forms of the items listed below is included in **Appendix 1**.
  - a. A signed domestic water supply permit form
  - b. California Environmental Quality Act (CEQA) documentation for the application (project)
  - c. Technical, Managerial, and Financial Assessment Form
  - d. An updated operations and maintenance plan
  - e. Well documentation/ specifications
  - f. Reservoir Documentation/ specifications
  - g. Hydropneumatic tank specifications (if there is a hydropneumatic tank)
  - h. Distribution system specifications
3. By **January 31, 2019**, acknowledge receipt of this Citation by completing and submitting the Notification of Receipt form in **Appendix 2**.

All submittals required by this Citation shall be electronically submitted to the State Water Board at the following address. The subject line for all electronic submittals

corresponding to this Citation shall include the following information: Water System name and number, citation number and title of the document being submitted.

Eric J. Zúñiga, District Engineer

Dwpdist13@waterboards.ca.gov

The State Water Board reserves the right to make modifications to this Citation as it may deem necessary to protect public health and safety. Such modifications may be issued as amendments to this Citation, and shall be deemed effective upon issuance.

Nothing in this Citation relieves Sierra Business Park of its obligation to meet the requirements of the California SDWA (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or of any regulation, standard, permit or order issued or adopted thereunder.

#### **PARTIES BOUND**

This Citation shall apply to and be binding upon Sierra Business Park, its owners, shareholders, officers, directors, agents, employees, contractors, successors, and assignees.


#### **SEVERABILITY**


The directives of this Citation are severable, and Sierra Business Park shall comply with each and every provision thereof, notwithstanding the effectiveness of any other provision.

#### **FURTHER ENFORCEMENT ACTION**

The California SDWA authorizes the State Water Board to: issue a citation or order with assessment of administrative penalties to a public water system for violation or continued

violation of the requirements of the California SDWA or any regulation, permit, standard, citation, or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the State Water Board to take action to suspend or revoke a permit that has been issued to a public water system if the public water system has violated applicable law or regulations or has failed to comply with an order of the State Water Board, and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with an order of the State Water Board. The State Water Board does not waive any further enforcement action by issuance of this Citation.

  
Eric J. Zúñiga, P.E.

  
Date

District Engineer

San Bernardino District



Appendices:

1. Required Permit Documents
2. Notification of Receipt Form

Certified Mail No. 7006 2150 0004 3940 8676



## APPENDIX 1. PERMIT DOCUMENTS

**STATE OF CALIFORNIA**  
**APPLICATION**  
**FOR**  
**DOMESTIC WATER SUPPLY PERMIT**  
**FROM**

Applicant: \_\_\_\_\_  
(Enter the name of legal owner, person(s) or organization)

Address: \_\_\_\_\_

System Name: \_\_\_\_\_

System Number: \_\_\_\_\_

TO: (District Engineer Name)  
(Name of District) District Engineer  
State Water Resources Control Board  
Division of Drinking Water  
(Address)



Pursuant and subject to the requirements of the California Health and Safety Code, Division 104, Part 12, Chapter 4 (California Safe Drinking Water Act), Article 7, Section 116525, relating to domestic water supply permits, application is hereby made for a domestic water supply permit to operate \_\_\_\_\_

(Applicant should state the type of system, e.g., community,

transient-noncommunity, or nontransient-noncommunity, and the proposed area of services. This application will also be used

for a change in ownership application.

FOR OFFICIAL USE

Date Received:

I (We) declare under penalty of perjury that the statements on this application and on the accompanying attachments are correct to my (our) knowledge and that I (we) are acting under authority and direction of the responsible legal entity under whose name this application is made.

By: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

Dated: \_\_\_\_\_

## **REQUIREMENTS FOR NEW WELLS**

STATE WATER RESOURCE CONTROL BOARD  
DIVISION DRINKING WATER  
Government Center  
464 W. 4<sup>th</sup> Street, Suite 437  
San Bernardino, CA 92401  
(909) 383-4328

### **1. APPLICATION:**

Application for an amended domestic water supply permit must be made as required by California Health and Safety Code, Division 104, Part 12, Chapter 4 (California Safe Drinking Water Act), Section 116550. An application form may be obtained from the State Water Resource Control Board, Division of Drinking Water, San Bernardino District (SWRCB-DDW). A blank permit amendment application form is enclosed.

### **2. CEQA DOCUMENTATION:**

Documentation required for compliance with the California Environmental Quality Act (CEQA). (See enclosed CEQA Checklist for Public Agencies)

### **3. WELL DRILLING SPECIFICATIONS:**

All new wells are to be drilled, constructed, and equipped in compliance with Bulletin Nos. 74-81 and 74-90, Water Well Standards: State of California (CWWS) and Title 22 Section 64560 (c) of the California Code of Regulations. Plans and specifications for new wells shall be prepared and submitted to SWRCB-DDW for review and approval prior to construction. Following installation of the pump and motor, **surface construction features** shall be provided for the well in accordance with Part II, Section 10 of the CWWS. In addition, facilities shall be provided to allow immediate, reliable, disinfection of all water produced by system sources. The facilities and your emergency chlorination plan should comply with the SWRCB -DDW "Water Purveyor Emergency Chlorination Plan" guidelines. Copies of both documents may be obtained from SWRCB -DDW upon request.

### **4. WELL PLOT PLANS:**

It is important that all potential sources of contamination which could render a water source unusable be clearly defined. We therefore request purveyors to submit plot plans prepared at a scale of not smaller than 1" = 50' for all wells showing the location of all pertinent structures within 200' of the well and all potential sources of pollution. The plans should be



periodically reviewed and updated. Please complete a "**Minimum Horizontal Distances**" table (blank table enclosed) for the new well.

**5. WATER WELL DRILLER'S REPORT:**

A copy of the completed Well Driller's Report must be submitted to SWRCB-DDW. Well Driller's Reports are documents completed by the well driller at the time of construction. The report includes the following information: owner, location, proposed use, equipment employed in the construction of the well, geological formations penetrated, gravel pack, casing material and diameter. Perforations, well seal, water levels, well tests, well log, date drilled, and the name of the well driller. This is the form submitted to the Department of Water Resources. A copy of the **county well drilling permit** is also requested.

**6. WELL DATA SHEET:**

The Well Data Sheet includes information on the pump and motor as well as a summary of the Well Driller's Report and location of the well. This form may be obtained from SWRCB-DDW and a blank form is enclosed. A **chlorination data sheet** (blank form enclosed) must also be completed for this well if continuous disinfection of the well water is to be provided.

**7. DRINKING WATER SOURCE ASSESSMENT PROGRAM (DWSAP)**

All new wells are required to comply with the requirements of the Drinking Water Source Assessment Program (DWSAP). This requires completion of a source water assessment on the new well to be permitted, identifying possible contaminating activities within specified radii of the well and determination of the well's vulnerability to these activities. The necessary documents to be completed for this program are enclosed.

**8. WATER QUALITY REPORTS:**

Prior to putting a new well into service, it must be analyzed for all Title 22 chemicals containing Primary and Secondary Standards in the following chemical groups:

- (a) Bacteriological Quality (including Heterotrophic Plate Count)
- (b) General Physical
- (c) General Mineral
- (d) Inorganic Chemicals
- (e) First of Four Consecutive Quarters of Radiological Chemical Monitoring
- (f) First of Four Consecutive Quarters of Regulated Volatile Organic Chemical Monitoring
- (g) Regulated Synthetic Organic Chemicals

The complete list of the Title 22 chemicals is found on the at:

[http://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/Chemicalcontaminants.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chemicalcontaminants.shtml)

## **9. INSPECTIONS:**

Where appropriate, well construction permits shall be obtained from the local health agency and inspection by County personnel shall be conducted. A copy of the well drilling permit shall be submitted to SWRCB-DDW.

The water purveyor shall provide competent inspection during all well construction phases, especially during installation of the sanitary seal.

After the well has been completed and prior to it being added to the system as a source of supply, SWRCB-DDW shall be contacted so a field inspection of the well may be conducted.

It is recommended that Items 2, 3 and 4 be submitted to SWRCB-DDW prior to construction of the well, for the Division to evaluate the location and construction of the well and start the CEQA approval process. The remaining items must be submitted following completion of the well, and before the Division can schedule a field inspection of the well.

**The well shall not be used to supply the domestic water system until the above documents have been submitted to SWRCB-DDW, and you have received an amended permit from the Division.**

If you have any questions regarding any of the above requirements please contact our San Bernardino District office at (909) 383-4328.

General Web Site Address:

[http://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/publicwatersystems.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/publicwatersystems.shtml)

DWSAP Information:

[http://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/DWSAP.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/DWSAP.shtml)

1

## CHECKLIST OF ITEMS NEEDED FOR A NEW WELL

1. A Completed Permit Amendment Application
2. CEQA Documentation
3. Well Drilling Specifications (Construction Plans) including Surface Construction Features
4. Well Plot Plan (scale 1" = 50') with minimum radii
5. Minimum Horizontal Distances Table
6. Water Well Driller's Report
7. Copy of the County Drilling Permit
8. A Completed Well Data Sheet and Chlorination Data Sheet (if applicable)
9. Drinking Water Source Assessment Program (DWSAP) Documentation
10. Water Quality Reports
  - (a) Bacteriological Quality (including Heterotrophic Plate Count)
  - (b) General Physical
  - (c) General Mineral
  - (d) Inorganic Chemicals
  - (e) First of Four Consecutive Quarters of Radiological Chemical Monitoring (gross alpha, gross alpha counting error, and radium 228)
  - (f) First of Four Consecutive Quarters of Regulated Volatile Organic Chemical Monitoring
  - (g) Regulated Synthetic Organic Chemicals



# **Drinking Water Source Assessment**

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Water System

**System name**

\_\_\_\_\_ County

Water Source

**Source name**

Assessment Date

**Month, year**

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California Department of Health Services

Drinking Water Field Operations Branch

DHS \_\_\_\_\_ District

District No.	_____
System No.	_____
Source No.	_____
PS Code	_____

## Checklist for Drinking Water Source Assessment - Ground Water Source

District Name \_\_\_\_\_ District No. \_\_\_\_\_ County \_\_\_\_\_  
System Name \_\_\_\_\_ System No. \_\_\_\_\_  
Source Name \_\_\_\_\_ Source No. \_\_\_\_\_ PS Code: \_\_\_\_\_

Completed by \_\_\_\_\_ Date \_\_\_\_\_

The following information should be contained in the drinking water source assessment submittal.

- \_\_\_\_\_ Cover Page
- \_\_\_\_\_ Checklist (*this form*)
- \_\_\_\_\_ Assessment Summary
- \_\_\_\_\_ Vulnerability Summary
- \_\_\_\_\_ Source Location Form (*not currently available, contact DHS for information*)
- \_\_\_\_\_ Delineation of groundwater protection zones
- \_\_\_\_\_ Source Data Sheet (select appropriate form)
  - \_\_\_\_\_ Well Data Sheet
  - \_\_\_\_\_ Spring Data Sheet
  - \_\_\_\_\_ Horizontal Well Data Sheet
- \_\_\_\_\_ Physical Barrier Effectiveness Checklist
- \_\_\_\_\_ Possible Contaminating Activities (PCA) inventory form
- \_\_\_\_\_ Vulnerability Ranking
- \_\_\_\_\_ Assessment map with source location and protection zone
- \_\_\_\_\_ Additional maps (optional) (e.g. local maps of zones and PCAs, recharge area maps, or maps indicating direction of ground water flow)
- \_\_\_\_\_ Means of Public Availability of Report (indicate those that will be used)
  - \_\_\_\_\_ Notice in the Consumer Confidence Report\* (minimum)
  - \_\_\_\_\_ Copy in regulatory agency (DHS or LPA) office (minimum)
  - \_\_\_\_\_ Copy in public water system office (recommended)
  - \_\_\_\_\_ Copy in public library/libraries
  - \_\_\_\_\_ Internet (indicate Internet address: \_\_\_\_\_)
  - \_\_\_\_\_ Other (describe) \_\_\_\_\_

\*The CCR should indicate where customers can review the assessments.

**Drinking Water Source Assessment and Protection (DWSAP) Program**

**Assessment Summary**

District Name \_\_\_\_\_ District No. \_\_\_\_\_ County \_\_\_\_\_  
System Name \_\_\_\_\_ System No. \_\_\_\_\_  
Source Name \_\_\_\_\_ Source No. \_\_\_\_\_ PS Code: \_\_\_\_\_

Completed by \_\_\_\_\_ Date \_\_\_\_\_

**Description of System and Source**

The WATER SYSTEM NAME water system is located in COUNTY NAME County and serves the [COMMUNITY | CITY | BUSINESS NAME]. There are approximately [XXX] service connections serving a population of [XXXXXX].

The drinking water source for the WATER SYSTEM NAME water system is [AQUIFER | WELLS | SPRING | HORIZONTAL WELLS] located in [GENERAL DESCRIPTION OF REGION]. The [RECHARGE AREA] for the source includes approximately [XXXXXX] [acres | square miles]. General land use is [agricultural | urban | residential | undeveloped | forested] etc.

**Assessment Procedures**

The assessment of the source SOURCE NAME was conducted by [DHS District office, County office, Water System, etc]. The following sources of information were used in the assessment: [water system files, DHS files, County records, previous study, etc].

Procedures used to conduct the assessment include: [file review, calculations, field review, meet with water system, run models, meet with other agencies, use GIS, etc.]

**Contents of this Assessment**

Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Assesment Summary
Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Vulnerability Summary
Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Source Location Form
Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Delineation of Protection Zones
Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Physical Barrier Effectiveness Checklist
Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Source Data Sheet
Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Inventory of Possible Contaminating Activities
Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Vulnerability Ranking
Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Assessment Map

**Comments**

Add other comments concerning this assessment.

**Drinking Water Source Assessment and Protection (DWSAP) Program**

**Vulnerability Summary**

District Name \_\_\_\_\_ District No. \_\_\_\_\_ County \_\_\_\_\_  
System Name \_\_\_\_\_ System No. \_\_\_\_\_  
Source Name \_\_\_\_\_ Source No. \_\_\_\_\_ PS Code: \_\_\_\_\_

Completed by \_\_\_\_\_ Date \_\_\_\_\_

**THE FOLLOWING INFORMATION MUST BE INCLUDED IN THE SYSTEM CONSUMER CONFIDENCE REPORT**

A source water assessment was conducted for the \_\_\_\_\_ *source name* \_\_\_\_\_ of the  
\_\_\_\_\_ *system name* \_\_\_\_\_ water system in \_\_\_\_\_ *month, year* \_\_\_\_\_.

The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply:

*PCA1*  
*PCA2*  
*PCA3*  
*Etc.*

The source is considered most vulnerable to the following activities not associated with any detected contaminants:

*PCA1*  
*PCA2*  
*PCA3*  
*Etc.*

**Discussion of Vulnerability**

*In this section, provide more information on the source's vulnerability to contamination.*

- *If there are no detected contaminants, use this language or similar:*

*"There have been no contaminants detected in the water supply, however the source is still considered vulnerable to activities located near the drinking water source."*

*In addition, you may include a description of actions that the water system is taking to protect the water supply.*

- *If there are detected contaminants, use this language or similar:*

*"Describe the detected contaminants and the PCAs with which they are associated. If the detected contaminants cannot be associated with a detected contaminant, explain this. In addition, provide additional information such as:*

- Elaboration on PCAs ...*
- Description of mitigating information ...*
- Actions that the water system is taking ..."*

### Delineation of Ground Water Protection Zones

District Name \_\_\_\_\_ District No. \_\_\_\_\_ County \_\_\_\_\_  
System Name \_\_\_\_\_ System No. \_\_\_\_\_  
Source Name \_\_\_\_\_ Source No. \_\_\_\_\_ PS Code: \_\_\_\_\_

Completed by \_\_\_\_\_ Date \_\_\_\_\_

#### Indicate the method used to delineate the zones:

(For more information refer to the Drinking Water Source Assessment and Protection document)

\_\_\_\_\_ Calculated Fixed Radius (Default) (Show calculations below)

\_\_\_\_\_ Modified Calculated Fixed Radius (Show calculations below and attach documentation for direction of ground water flow)

\_\_\_\_\_ More detailed methods

Type used (i.e., analytical methods, hydrogeologic mapping, modeling):

\_\_\_\_\_ Arbitrary Fixed Radius (For use only by or with permission of DHS—use minimum distances shown below)

#### Calculated Fixed Radius Equation

The equation for the calculated fixed radius (R) is  $R_t = \sqrt{Q t / \pi \eta H}$

$R_t = R_2, R_5, \text{ or } R_{10}$  corresponding to  $t$  (Calculate  $R$  for each travel time)

$Q$  = maximum pumping capacity of well

( $\text{ft}^3/\text{year} = \text{gpm} * 70,267$ ): \_\_\_\_\_

$t$  = time of travel (years), 2, 5 and 10 years

$\pi = 3.1416$

$\eta$  = effective porosity (decimal percent) (If unknown, assume 0.2):

$H$  = screened interval of well (feet) (If unknown, assume 10% of  $Q$  gpm, 10 ft minimum):  
\_\_\_\_\_

**Specific methods follow on next page**



### **Calculated Fixed Radius Delineation Method (Default)**

Using the equation presented above, calculate the size of zones for the appropriate aquifer setting of the source.

#### **Porous Media Aquifer**

Zone A (2 year TOT)  $R_2 =$  \_\_\_\_\_ ft, minimum = 600 ft—use larger: \_\_\_\_\_ ft

Zone B5 (5 year TOT)  $R_5 =$  \_\_\_\_\_ ft, minimum = 1,000 ft—use larger: \_\_\_\_\_ ft

Zone B10 (10 year TOT)  $R_{10} =$  \_\_\_\_\_ ft, minimum = 1,500 ft—use larger: \_\_\_\_\_ ft

#### **Fractured Rock Aquifer**

(Increase size of zones by 50%)

Zone A (2 year TOT)  $1.5R_2 =$  \_\_\_\_\_ ft, minimum = 900 ft—use larger: \_\_\_\_\_ ft

Zone B5 (5 year TOT)  $1.5R_5 =$  \_\_\_\_\_ ft, minimum = 1,500 ft—use larger: \_\_\_\_\_ ft

Zone B10 (10 year TOT)  $1.5R_{10} =$  \_\_\_\_\_ ft, minimum = 2,250 ft—use larger: \_\_\_\_\_ ft

### **Modified Calculated Fixed Radius Delineation Method**

In porous media aquifers, if the direction of ground water flow is known (see Section 6.2.3), the default zone circle may be shifted upgradient by  $0.5R_t$ . The upgradient and downgradient limits of the zone are determined below.

#### **Zone A (2-year TOT)**

upgradient distance =  $1.5R_2 =$  \_\_\_\_\_ ft, minimum = 900 ft, use larger: \_\_\_\_\_ ft

downgradient distance =  $0.5R_2 =$  \_\_\_\_\_ ft, minimum = 300 ft, use larger: \_\_\_\_\_ ft

#### **Zone B5 (5-year TOT)**

upgradient distance =  $1.5R_5 =$  \_\_\_\_\_ ft, minimum = 1,500 ft, use larger: \_\_\_\_\_ ft

downgradient distance =  $0.5R_5 =$  \_\_\_\_\_ ft, minimum = 500 ft, use larger: \_\_\_\_\_ ft

#### **Zone B10 (10-year TOT)**

upgradient distance =  $1.5R_{10} =$  \_\_\_\_\_ ft, minimum = 2,250 ft, use larger: \_\_\_\_\_ ft

downgradient distance =  $0.5R_{10} =$  \_\_\_\_\_ ft, minimum = 750 ft, use larger: \_\_\_\_\_ ft

### Physical Barrier Effectiveness Checklist - Ground Water Source

District Name \_\_\_\_\_ District No. \_\_\_\_\_ County \_\_\_\_\_  
System Name \_\_\_\_\_ System No. \_\_\_\_\_  
Source Name \_\_\_\_\_ Source No. \_\_\_\_\_ PS Code: \_\_\_\_\_

Completed by \_\_\_\_\_ Date \_\_\_\_\_

Use the DHS Well Data Sheet (separate document) to complete the following form.

Directions:

1. Read through the form and collect the information needed to complete the form.  
(Hydrogeology, Soils, Presence of abandoned or improperly destroyed wells, Well construction and operation.)
2. Determine Parameter A, Type of Aquifer.
  - If the aquifer is confined, use the right-hand column, and evaluate only the parameters indicated for confined aquifers.
  - If the aquifer is unconfined, semi-confined, or the degree of confinement is unknown, or if the aquifer is fractured rock, use the left-hand column and evaluate only the parameters for unconfined aquifers.
3. For each parameter appropriate for the source, place a check in the box for the answer that most closely applies to that source. If more than one answer is possible, select the more conservative (i.e. lower points) answer. *[For example, if the depth to static water (Parameter D) has varied between 45 and 55 feet, choose answer 2 (20 to 50 feet).]*
4. Add the points in the column appropriate for the source and interpret the score as shown on the bottom of the last page.
  - Determine whether the source has a High, Moderate or Low Physical Barrier Effectiveness. Use this in the Vulnerability analysis. The higher the points, generally the more effective the source and site are to retarding the movement of contaminants to the water supply.

NOTE: If the source is located in fractured rock the source is considered to have a Low Physical Barrier Effectiveness, regardless of the point total. So, if Parameter B, Aquifer Material is 3, the remainder of the form does not need to be completed.

**Drinking Water Source Assessment and Protection (DWSAP) Program**

Physical Barrier Effectiveness (PBE) – Ground Water, page 1 of 2

Source Name: \_\_\_\_\_ Source No.: \_\_\_\_\_

PARAMETER	POINTS			
	Unconfined		Confined	
<b>A. TYPE OF AQUIFER</b>				
Confinement (up to 50 points maximum) choose one				
a. Unconfined, Semi-confined, Fractured Rock, Unknown	0			
b. Confined			50	
<b>B. AQUIFER MATERIAL (Unconfined Aquifer)</b>				
Type of materials within the aquifer (up to 20 points maximum) choose one				
1. Porous Media (Interbedded sands, silts, clays, gravels) with continuous clay layer minimum 25' thick above water table within Zone A	20			
2. Porous Media (Interbedded sands, silts, clays, and gravels)	10			
3. Fractured rock *	0			
(* Low Physical Barrier Effectiveness - no further questions required)				
<b>C. PATHWAYS OF CONTAMINATION (All Aquifers)</b>				
Presence of Abandoned or Improperly Destroyed Wells (up to 10 points maximum)				
1. Are they present within Zone A (2-year time of travel (TOT) distance)?				
a. Yes or unknown	0		0	
b. No	5		5	
2. Are they present within Zone B5 (2- to 5-year TOT distance)?				
a. Yes or unknown	0		0	
b. No	3		3	
3. Are they present within Zone B10 (5- to 10-year TOT distance)?				
a. Yes or unknown	0		0	
b. No	2		2	
<b>D. STATIC WATER CONDITIONS (Unconfined Aquifer)</b>				
Depth to static Water (DTW) = _____ feet (up to 10 points maximum) choose one				
1. 0 to 20 feet	0			
2. 20 to 50 feet	2			
3. 50 to 100 feet	6			
4. > 100 feet	10			
<b>E. WELL OPERATION (Unconfined Aquifer)</b>				
Depth to Uppermost Perforations (DUP) DUP = _____ feet				
Maximum Pumping Rate of Well (Q) Q = _____ gallons/minute				
Length of screened interval (H) H = _____ feet				
$[(DUP - DTW) / (Q/H)]$ = _____ (up to 10 points maximum) choose one				
1. < 5	0			
2. 5 to 10	5			
3. > 10	10			

**Drinking Water Source Assessment and Protection (DWSAP) Program**

Physical Barrier Effectiveness – Ground Water, page 2 of 2

Source Name: \_\_\_\_\_ Source No. \_\_\_\_\_

PARAMETER	POINTS			
	Unconfined		Confined	
<b>F. HYDRAULIC HEAD (Confined Aquifer)</b> What is the relationship in hydraulic head between the confined aquifer and the overlying unconfined aquifer? (i.e. does the well flow under artesian conditions?) (up to 20 points maximum) choose one				
1. head in confined aquifer is higher than head in unconfined aquifer under all conditions			20	
2. head in confined aquifer is higher than head in unconfined aquifer under static conditions			10	
3. head in confined aquifer is lower than or same as head in unconfined aquifer			0	
4. unknown			0	
<b>G. WELL CONSTRUCTION (All Aquifers)</b>				
1. Sanitary Seal (Annular Seal) Depth = _____ feet (up to 10 points maximum) choose one				
a. None or less than 20 feet deep	0		0	
b. 20 to 50 ft deep	6		10	
c. 50 ft or greater	10		10	
2. Surface seal (concrete cap) (up to 4 points maximum) choose one				
a. Not present or improperly constructed	0		0	
b. Watertight, slopes away from well, at least 2' laterally in all directions	4		4	
3. Flooding potential at well site (up to 1 point maximum) choose one				
a. Subject to localized flooding (i.e. in low area or unsealed pit or vault) or Within 100 year flood plain	0		0	
b. Not subject to flooding	1		1	
4. Security at well site (up to 5 points maximum) choose one				
a. Not secure	0		0	
b. Secure (i.e. housing, fencing, etc.)	5		5	
Maximum Points Possible	70		100	
<b>POINT TOTAL FOR THIS SOURCE</b>				

**Physical Barrier Effectiveness SCORE INTERPRETATION**

<u>Point Total</u>	<u>Effectiveness</u>
___ 0 to 35 =	Low (includes all sources in Fractured Rock)
___ 36 to 69 =	Moderate
___ 70 to 100 =	High

**Possible Contaminating Activities (PCA) Inventory Form - Ground Water**

District Name \_\_\_\_\_ District No. \_\_\_\_\_ County \_\_\_\_\_  
System Name \_\_\_\_\_ System No. \_\_\_\_\_  
Source Name \_\_\_\_\_ Source No. \_\_\_\_\_ PS Code: \_\_\_\_\_

Completed by \_\_\_\_\_ Date \_\_\_\_\_

Check the PCA tables that will be used for this drinking water source (assessment must include the "Other" checklist and at least one of the remaining three checklists):

Commercial/Industrial \_\_\_\_\_  
Residential/Municipal \_\_\_\_\_  
Agricultural/Rural \_\_\_\_\_  
Other (required for all) \_\_\_\_\_

Proceed to appropriate checklist or checklists. Indicate whether the PCA is located in the zone by placing a Y (yes), N (no), or U (unknown) in the appropriate boxes.

Example:

Zone A	Zone B5	Zone B10
Y	N	N
N	Y	U
U	N	N

Risk Ranking of PCAs, where VH = Very High Risk, H = High Risk, M = Moderate Risk, L = Low Risk



**PCA Checklist COMMERCIAL/INDUSTRIAL**

PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
Automobile- Body shops (H)				
Automobile- Car washes (M)				
Automobile- Gas stations (VH)				
Automobile- Repair shops (H)				
Boat services/repair/ refinishing (H)				
Chemical/petroleum pipelines (H)				
Chemical/petroleum processing/storage (VH)				
Dry cleaners (VH)				
Electrical/electronic manufacturing (H)				
Fleet/truck/bus terminals (H)				
Furniture repair/ manufacturing (H)				
Home manufacturing (H)				
Junk/scrap/salvage yards (H)				
Machine shops (H)				
Metal plating/ finishing/fabricating (VH)				
Photo processing/printing (H)				
Plastics/synthetics producers (VH)				
Research laboratories (H)				
Wood preserving/treating (H)				
Wood/pulp/paper processing and mills (H)				
Lumber processing and manufacturing (H)				
Sewer collection systems (H, if in Zone A, otherwise L)				
Parking lots/malls (>50 spaces) (M)				
Cement/concrete plants (M)				
Food processing (M)				
Funeral services/graveyards (M)				
Hardware/lumber/parts stores (M)				
Appliance/Electronic Repair (L)				
Office buildings/complexes (L)				
Rental Yards (L)				
RV/mini storage (L)				

**PCA Checklist RESIDENTIAL/MUNICIPAL**

PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
Airports - Maintenance/ fueling areas (VH)				
Landfills/dumps (VH)				
Railroad yards/ maintenance/ fueling areas (H)				
Septic systems - high density (>1/acre) (VH if in Zone A, otherwise M)				
Sewer collection systems (H, if in Zone A, otherwise L)				
Utility stations - maintenance areas (H)				
Wastewater treatment plants (VH in Zone A, otherwise H)				
Drinking water treatment plants (M)				
Golf courses (M)				
Housing - high density (>1 house/0.5 acres) (M)				
Motor pools (M)				
Parks (M)				
Waste transfer/recycling stations (M)				
Apartments and condominiums (L)				
Campgrounds/ Recreational areas (L)				
Fire stations (L)				
RV Parks (L)				
Schools (L)				
Hotels, Motels (L)				

**PCA Checklist AGRICULTURAL/RURAL**

PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
Grazing (> 5 large animals or equivalent per acre) (H in Zone A, otherwise M)				
Concentrated Animal Feeding Operations (CAFOs) as defined in federal regulation <sup>1</sup> (VH in Zone A, otherwise H)				
Animal Feeding Operations as defined in federal regulation <sup>2</sup> (VH in Zone A, otherwise H)				
Other Animal operations (H in Zone A, otherwise M)				
Farm chemical distributor/ application service (H)				
Farm machinery repair (H)				
Septic systems - low density (<1/acre) (H in Zone A, otherwise L)				
Lagoons / liquid wastes (H)				
Machine shops (H)				
Pesticide/fertilizer/ petroleum storage & transfer areas (H)				
Agricultural Drainage (H in Zone A, otherwise M)				
Wells - Agricultural/ Irrigation (H)				
Managed Forests (M)				
Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M)				
Fertilizer, Pesticide/ Herbicide Application (M)				
Sewage sludge/biosolids application (M)				
Crops, nonirrigated (e.g., Christmas trees, grains, grass seeds, hay, pasture) (L) (includes drip-irrigated crops)				

**PCA Checklist OTHER ACTIVITIES**

PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
NPDES/WDR permitted discharges (H)				
Underground Injection of Commercial/Industrial Discharges (VH)				
Historic gas stations (VH)				
Historic waste dumps/ landfills (VH)				
Illegal activities/ unauthorized dumping (H)				
Injection wells/ dry wells/ sumps (VH)				
Known Contaminant Plumes (VH)				
Military installations (VH)				
Mining operations - Historic (VH)				
Mining operations - Active (VH)				
Mining - Sand/Gravel (H)				
Wells - Oil, Gas, Geothermal (H)				
Salt Water Intrusion (H)				
Recreational area - surface water source (H)				
Underground storage tanks - Confirmed leaking tanks (VH)				
Underground storage tanks - Decommissioned - inactive tanks (L)				
Underground storage tanks - Non- regulated tanks (tanks smaller than regulatory limit) (H)				
Underground storage tanks - Not yet upgraded or registered tanks (H)				
Underground storage tanks - Upgraded and/or registered - active tanks (L)				
Above ground storage tanks (M)				
Wells - Water supply (M)				
Construction/demolition staging areas (M)				
Contractor or government agency equipment storage yards (M)				
Dredging (M)				
Transportation corridors - Freeways/state highways (M)				
Transportation corridors - Railroads (M)				
Transportation corridors - Historic railroad right-of-ways (M)				
Transportation corridors - Road Right-of- ways (herbicide use areas) (M)				
Transportation corridors - Roads/ Streets (L)				
Hospitals (M)				
Storm Drain Discharge Points (M)				
Storm Water Detention Facilities (M)				

**PCA Checklist OTHER ACTIVITIES (continued)**

PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
Artificial Recharge Projects - Injection wells (potable water) (L)				
Artificial Recharge Projects - Injection wells (non-potable water) (M)				
Artificial Recharge Projects - Spreading Basins (potable water) (L)				
Artificial Recharge Projects - Spreading Basins (non-potable water) (M)				
Medical/dental offices/clinics (L)				
Veterinary offices/clinics (L)				
Surface water - streams/ lakes/rivers (L)				
Wells - monitoring, test holes (L)				



## **Vulnerability Ranking – Ground Water**

Download the "Vulnerability Ranking List" from the DHS website. Follow these directions for using the spreadsheet.

### General Notes:

The list in the spreadsheet (*GW Vulnerability Ranking List.xls*, sheet "GW") comes from the PCA checklists. Each PCA is listed four (4) times: Zone A, Zone B5, Zone B10, and Unknown.

PCA risk points (Column C) have been assigned based on the risk of the PCA (VH, H, M, or L) for that zone.

To use the Vulnerability Ranking Spreadsheet follow these steps:

1. Conduct the PCA inventory.
2. Make a copy of the spreadsheet "GW" and give the new sheet a descriptive name.
3. On the new sheet, delete rows for any PCAs that do not exist in any of the zones. (Remember that each PCA is listed 4 times).
4. Delete rows for PCAs that don't occur in a particular zone (i.e. if the PCA exists only in Zone A, delete the rows for Zone B5, B10 and Unknown).
5. For PCAs whose existence is unknown, delete the appropriate rows (i.e. if you have no idea whether the PCA exists, keep the Unknown row and delete the other three. Similarly, if you know the PCA exists in Zone A but you aren't sure about B5 and B10, delete the rows for B5 and B10 and keep the rows for Zone A and Unknown.)
6. The remaining rows should represent all of the PCAs that exist or whose existence is unknown within the zones. (For some sources, especially in urban areas, this may still be a very long list.)
7. Calculate Physical Barrier Effectiveness for the source. Insert the corresponding points (i.e., H = 1, M = 3, L = 5) into column E for all the rows.
8. Determine the Vulnerability Score in Column F (sum of columns C + D + E)
9. Sort the list by the Vulnerability Score, from highest to lowest.
10. The source is considered vulnerable to all PCAs with vulnerability score  $\geq 8$ . Shade these yellow.
11. Review the list. This is a good time to review the assessment with the water supplier. Items to consider:
  - a. Are there detected contaminants in the source water? What are the PCAs associated with the contaminants? Are those PCAs at the top of the list? If not, move them there with a note or asterisk.

***Drinking Water Source Assessment and Protection (DWSAP) Program***

- b. What were the perceived biggest problems before doing the assessment? Are these PCAs at the top of the list? Should they be?
  - c. Are there PCAs at the top of the list that don't seem particularly important?
- 12. If there are any concerns with the vulnerability ranking, go back and review the PCA inventory. Revise the inventory as necessary.
- 13. Revise the vulnerability ranking as necessary.
- 14. Print the final list, save to disk, and submit with the remainder of the assessment.

## **Instructions for Groundwater Assessment Map**

The assessment map for a groundwater source should be submitted on USGS topographic maps ("quad maps") at 1:24,000 scale. The map should show:

- Location of the source
- Protection Zones
- Significant Possible Contaminating Activities (PCAs) within the zone (optional, but recommended)

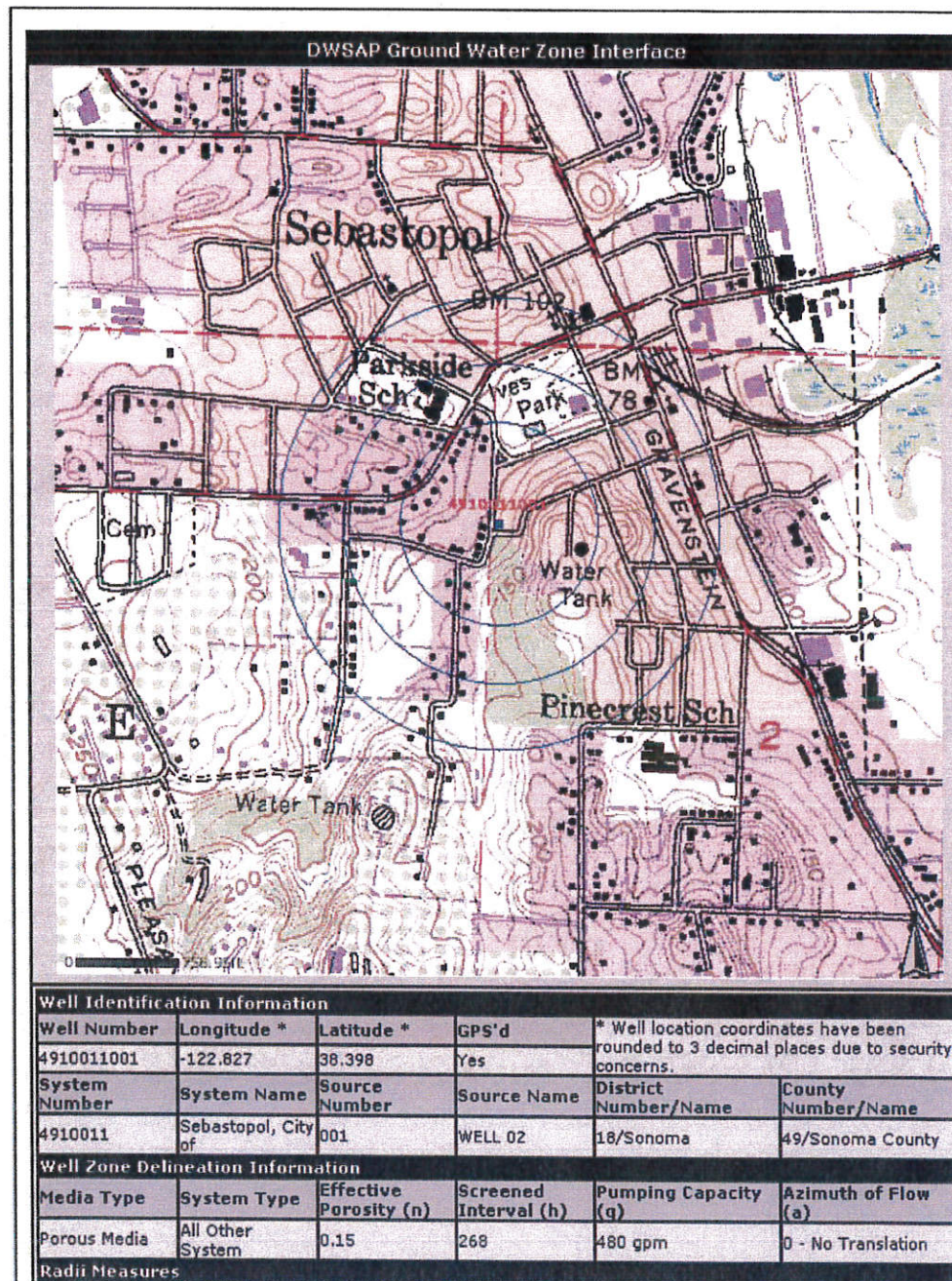
The protection zone for groundwater sources are a set of three circles surrounding the source. (For springs and horizontal wells, if determined to be groundwater sources, the protection zones need not include those portions of the circles down gradient of the source.) The radius of the protection zone is determined in the Delineation section of the assessment and depends upon the aquifer material, well pumping rate, screened interval, and aquifer porosity.

USGS quad maps may be obtained from map or backpacking retailers. There are also several computer software programs that include USGS quad maps.

At the discretion of the regulatory agency, the water system may request that the regulatory agency prepare a map displaying the source and zones.

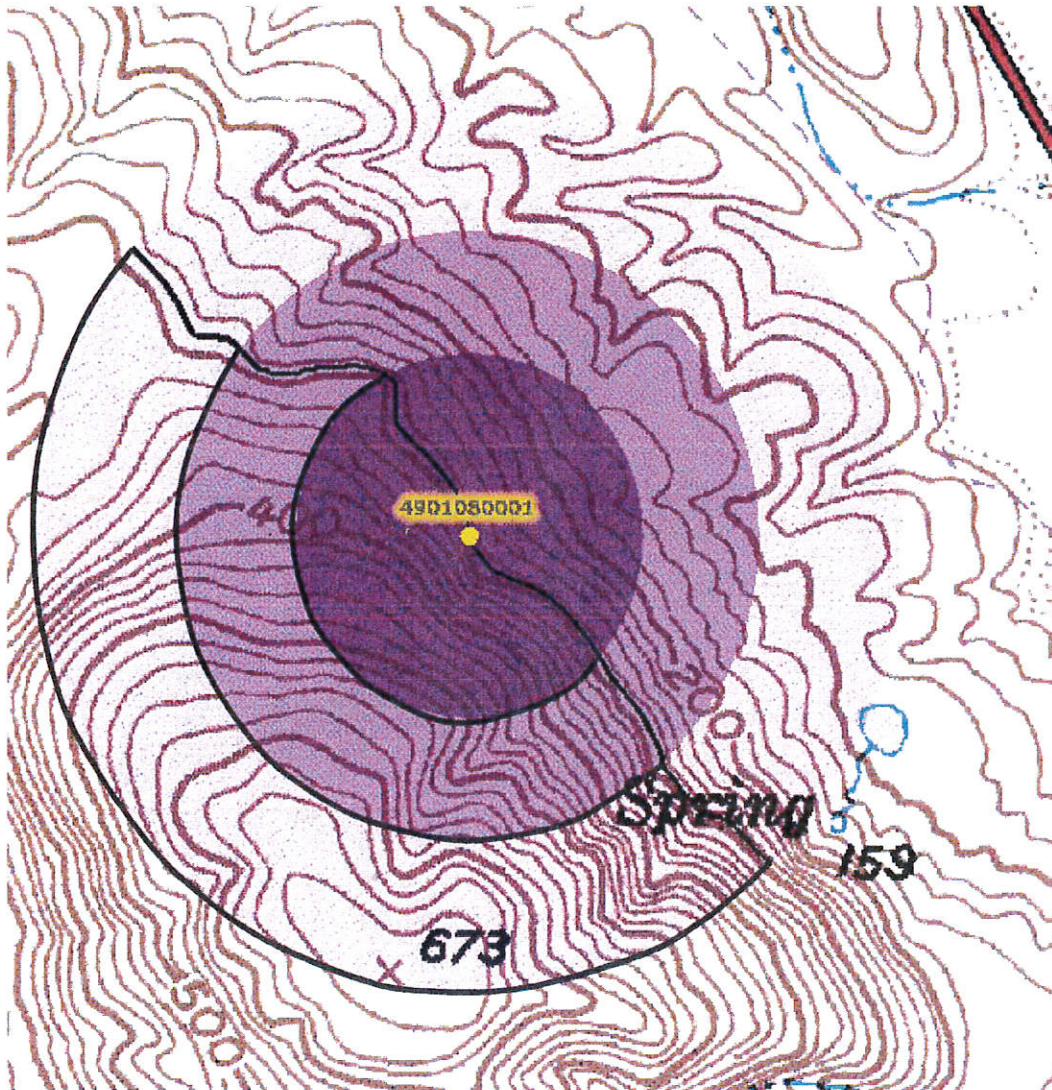
Example maps for a well source and a spring source are attached.

## Example Well Assessment Map





### Example Spring Assessment Map





## WELL DATA SHEET (Page 1 of 3)

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.

\* Indicates items required for Source Water Assessment

\*\* Indicates additional items required for assessments and Ground Water Rule

	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
<b>DATA SHEET GENERAL INFORMATION</b>		
System Name		from SWRCB-DDW database
System Number		from SWRCB-DDW database
Source of Information (well log, DDW/County files, system, etc)		
Organization Collecting Information (DDW, County, System, other)		
Date Information Collected/Updated		
<b>WELL IDENTIFICATION</b>		
* Well Number or Name		from SWRCB-DDW database
* SWRCB-DDW Source Identification Number (PS Code)		
DWR Well Log on File? ("YES" or "NO")		
State Well Number (from DWR)		
Well Status (Active, Standby, Inactive)		from SWRCB-DDW database
<b>WELL LOCATION</b>		
Latitude		from SWRCB-DDW database
Longitude		from SWRCB-DDW database
Ground Surface Elevation (ft above Mean Sea Level)		
Street Address		
Nearest Cross Street		
City		
County		
* Neighborhood/Surrounding Area (see Note 1)		
Site plan on file? ("YES" or "NO")		
DWR Ground Water Basin		to come from DWR
DWR Ground Water Sub-basin		to come from DWR
<b>SANITARY CONDITIONS</b>		
** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft)		
Distance to Active Wells (ft)		
Distance to Abandoned Wells (ft)		
Distance to Surface Water (ft)		
** Size of controlled area around well (square feet)		
* Type of access control to well site (fencing, building, etc)		
* Surface Seal? (Concrete slab)("YES", "NO" or "UNKNOWN")		
* Dimensions of concrete slab: Length(ft)/ Width(ft)/ Thick(in)		
* Within 100 year flood plain? ("YES", "NO" or "UNKNOWN")		
* Drainage away from well? ("YES" or "NO")		
<b>ENCLOSURE/HOUSING</b>		
Enclosure Type (building, vault, none, etc.)		
Floor material		
Located in Pit? ("YES" or "NO")		
Pit depth (feet) (if applicable)		
<b>WELL CONSTRUCTION</b>		
Date drilled		
Drilling Method		
Depth of Bore Hole (feet below ground surface)		
Casing Beginning Depth/Ending Depth(ft below surface); 2nd Casing Beginning Depth/Ending Depth; 3rd Casing, etc.		
Casing Diameter (inches); 2nd Casing Diameter; 3rd Casing, etc.		
Casing Material; 2nd Casing Material; 3rd Casing, etc.		
Conductor casing used? ("YES", "NO" or "UNKNOWN") (See Note 2)		
Conductor casing removed? ("YES", "NO" or "UNKNOWN")		
* Depth to highest perforations/screens (ft below surface) (or "UNKNOWN")		



## WELL DATA SHEET (Page 2 of 3)

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.

\* Indicates items required for Source Water Assessment

\*\* Indicates additional items required for assessments and Ground Water Rule

	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
<b>WELL CONSTRUCTION (continued)</b>		
Screened Interval Beginning Depth/Ending Depth (ft below surface); 2nd Screened Interval Beg. Depth/Ending Depth; 3rd Screened Interval, etc.		
* Total length of screened interval (ft) (default = 10% pump capacity in gpm) (or "UNKNOWN")		
* Annular Seal? ("YES", "NO" or "UNKNOWN") (See Note 3)		
* Depth of Annular Seal (ft)		
Material of Annular Seal (cement grout, bentonite, etc.)		
Gravel pack, Depth to top (ft below ground surface)		
Total length of gravel pack (ft)		
<b>AQUIFER</b>		
* Aquifer Materials (list all that apply: sand, silt, clay, gravel, rock, fractured rock)		
* Effective porosity (decimal percent) (default = 0.2) (or "UNKNOWN")		
* Confining layer (Impervious Strata) above aquifer? ("YES", "NO" or "UNKNOWN")		
Thickness of confining layer, if known (ft)		
Depth to confining layer, if known (ft below ground)		
* Static water level (ft below ground surface)		
Static water level measurement: Date/Method		
Pumping water level (ft below ground surface)		
Pumping water level measurement: Date/Method		
<b>WELL PRODUCTION</b>		
Well Yield (gpm)		
Well Yield Based On (i.e., pump test, etc.)		
Date measured		
Is the well metered? ("YES" or "NO")		
Production (gallons per year)		
Frequency of Use (hours/year)		
Typical pumping duration (hours/day)		
<b>PUMP</b>		
Make		
Type		
Size (hp)		
* Capacity (gpm)		
Depth to suction intake (ft below ground surface)		
Lubrication Type		
Type of Power: (i.e., electric, diesel, etc.)		
Auxiliary power available? ("YES" or "NO")		
Operation controlled by: (i.e., level in tank, pressure, etc.)		
Pump to Waste capability? ("YES" or "NO")		
Discharges to: (i.e., distribution system, storage, etc.)		
<b>REMARKS AND DEFECTS (use additional sheets as necessary)</b>		
<b>NOTES</b>		
1. Neighborhood/Surrounding Area (list all that apply): A = Agricultural, Ru = Rural, Re = Residential, Co = Commercial, I = Industrial, Mu = Municipal, P = Pristine, O = Other 2. Conductor Casing - Oversized casing used to stabilize bore hole during well construction. Should be removed during installation of annular seal. 3. Annular Seal - Seal of grout in the space between the well casing and the wall of the drilled hole. Sometimes called "sanitary seal".		

## WELL DATA SHEET (Page 3 of 3)

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.

\* Indicates items required for Source Water Assessment

\*\* Indicates additional items required for assessments and Ground Water Rule

### Please Note:

The information on this Well Data Sheet is considered confidential. To allow the information to be included in the permit report, or made available subject to a public information act request, the waiver clause below has to be signed and dated by the owner (public water system). In lieu of this signature, the WDS has to be retained in a confidential file, or the information shown in the shaded rows has to be "blacked out."

I/We, (Name) \_\_\_\_\_,

certify that I/We are the present owners of the well described on this well data sheet. I/We have reviewed the information presented on this well data sheet and I/We take no exception to having the information included in the Department of Public Health's Engineering Report. I/We understand that by including the well data sheet in the Engineering Report, it will be part of a public document that can be reviewed and copied subject to the public information act request.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

### Well Data Sheet Supplement

#### REMARKS AND DEFECTS

(Use or note these items as appropriate)

(\*\* indicates items pertinent to Ground Water Rule)

Distance (ft) to other sanitary concerns: \_\_\_\_\_

\*\* Type of Sanitary Concern: \_\_\_\_\_

\*\* Type of Sanitary Concern: \_\_\_\_\_

\*\* Type of Sanitary Concern: \_\_\_\_\_

\*\* Type of Sanitary Concern: \_\_\_\_\_

Raw Water Quality concerns? (Yes or No)

\*\* Microbiological (coliform)

Chemicals

Other (list)

\*\* Continuous Chlorination provided? (Yes or No)

Condition of enclosure or housing

Pit Drained? (if applicable)

Pitless Adaptor? Make and Model

Height of pump base (inches)

Casing Vent? (yes or no)

Air/Vacuum Release? (yes or no)

Sampling Taps? (yes or no)

Location of sampling taps

Wellhead Riser? (yes or no); height above well

Other



**STATE WATER RESOURCE CONTROL BOARD  
DIVISION OF DRINKING WATER**

**CHLORINATION DATA**

**System Name:** \_\_\_\_\_ **System No.:** \_\_\_\_\_

**Source of Information:** \_\_\_\_\_

**Collected by:** \_\_\_\_\_ **Date:** \_\_\_\_\_

<b>Reason for chlorination</b> (emergency, mandatory or optional):	
Water Source:	
Water treated (raw/filtered etc.):	
Chlorine demand character:	
Dosage:	
Point of application:	
Mixing:	
Contact time before use:	
Contact time for residual test:	
<b>Water Flow:</b> Variation:	
Peak Hourly Flow:	
How measured:	
<b>Equipment:</b> Type:	
Make:	
Model:	
Capacity:	
Condition:	
Automatic switchover capability?	
Portable emergency chlorinator available?	
Chlorine residual monitored continuously?	
Low level residual alarm?	
At what level of chlorine residual is the alarm activated?	
How often are residual analyses conducted?	
Type of residual measured (free or combined):	
Type of residual test used:	
<b>Chemical added:</b> (% available chlorine, form):	
Cylinder or crock capacity:	
Stock on hand/days supply:	
Chlorine brand/product name:	
<b>Housing and Safety Features:</b> Housing:	
Insulation:	
Heating:	
Locks:	
Lighting:	
Ventilation:	
Leak detector with alarm:	
Switches outside chlorination room:	
Gas mask:	
Is an emergency plan of action posted?	
<b>Operation and maintenance:</b> Lapse during changes:	
Ability to make repairs:	
How often is the equipment inspected?	
Operations records kept:	
Condition of scales(chlorine gas):	

**STATE WATER RESOURCE CONTROL BOARD  
DIVISION OF DRINKING WATER**

**DISTRIBUTION DATA**

**System Name:** \_\_\_\_\_ **System No.:** \_\_\_\_\_  
**Source of Information:** \_\_\_\_\_  
**Collected By:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Mains:**

Material	Amount(%)	Size	Class/Gage	Condition

Joints (type): \_\_\_\_\_  
Amount of pipe less than four inches in diameter: \_\_\_\_\_  
Minimum size of new mains installed: \_\_\_\_\_  
Type of pipe used for new and replacement mains: \_\_\_\_\_  
Minimum depth of cover: \_\_\_\_\_  
Distance from sewers and/or sewage disposal (practice or policy): \_\_\_\_\_

**Infiltration Hazard:**

Relationship of water lines to groundwater table: \_\_\_\_\_  
Extent of low head or gravity lines: \_\_\_\_\_

**Disinfection (method):**

New mains: \_\_\_\_\_  
Repaired mains: \_\_\_\_\_

**Dead Ends(extent):**

Flushing: \_\_\_\_\_  
Characteristics of water flushed: \_\_\_\_\_

**Valves:**

Is number and location of valves satisfactory? \_\_\_\_\_  
Main line isolation provided: \_\_\_\_\_  
Air release/vacuum relief valves provided: \_\_\_\_\_  
Other: \_\_\_\_\_  
Valve exercise program: \_\_\_\_\_  
Valve maps maintained? \_\_\_\_\_

**Service Connections:**

Materials: \_\_\_\_\_

**Defects and Remarks:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**STATE WATER RESOURCES CONTROL BOARD (SWRCB)  
DIVISION OF DRINKING WATER (DDW)**

**MINIMUM HORIZONTAL DISTANCE:**

**System Name:** \_\_\_\_\_ **System No.:** \_\_\_\_\_

**Well Name:** \_\_\_\_\_

**Source of information:** \_\_\_\_\_

**Date collected:** \_\_\_\_\_

<b>1. SEWERAGE FACILITIES</b>	<b>MINIMUM FEET</b>	<b>ACTUAL FEET</b>	<b>COMMENTS</b>
a. Sanitary Sewer and House Laterals	50		
b. Sewer Manhole	100		
c. Sewage Pumping Station	100		
d. Sewage Treatment Plant	150		
e. Sewage Lagoons	500		
f. Lined Effluent Discharge Channel	200		
g. Sewage Irrigation Areas	500 (2)		
h. Sewage Spreading Areas	500		
i. Sewage Percolation/Evaporation Ponds	500		
j. Watertight Septic Tank	100		
k. Horizontal Leach Lines	100		
l. Seepage Pit and Cesspool	150 (1)		
m. Pit Privy	50		
n. Vault Privy (Pumpout)	50		
o. Storm Sewers	50		
p. Drainage Channel	50		
g. Flood Plain (100-year flood)	Above high water line		
<b>2. INDUSTRIAL FACILITIES</b>			
a. Barnyard, feedlot, stable and pasture areas	100		
b. Industrial waste sewers, holding tanks, ponds and storage areas	(4)		
c. Petroleum storage tanks (sub-surface)	100 (3)		
d. Petroleum transmission mains	500 (3)		
<b>3. SOLID WASTE DISPOSAL SITE</b>			
Class 1	(4)		
Class 2	2,000		
Class 3	500		
<b>4. RECYCLED WATER (RW)</b>			
a. Disinfected Tertiary RW Irrigation	50 (5)		
b. Disinfected Tertiary RW Impoundment	100		
c. Disinfected Secondary-2.2/23 RW Irrigation or Impoundment	100		
d. Undisinfected Secondary RW Irrigation or Impoundment	150		
<b>4. OTHER</b>			
a. Dwelling	25		
b. Pond, Lake, Stream	50-100		
c. Abandoned Conduit	50		
d. Cathodic Protection Well:			
- Cased	50		
- No casing	200		
g. Abandoned & Destroyed Wells per DWR Bulletin 74	None required		
Remarks & Defects:			

**Notes**

- Bottom of pit shall be more than 10 feet above groundwater level.
- The sewage-irrigated area from the well shall be plainly marked preferably by a fence.
- Underground storage and transmission facilities shall be pressure tested annually.
- Facilities must be identified & evaluated on a case by case basis.
- Distance can be less than 50 feet, provided all the conditions specified in Title 22, CCR, §60310(a) are met.



STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD  
DIVISION OF DRINKING WATER

**HYDROPNEUMATIC TANK DATA**

**System Name:** \_\_\_\_\_ **System No.:** \_\_\_\_\_  
**Source of Information:** \_\_\_\_\_  
**Updated by:** \_\_\_\_\_ **Date:** \_\_\_\_\_

<b>Number or Name:</b>		
Date constructed:		
Purpose (storage, etc.):		
Capacity:		
<b>Location (specific):</b>		
Controlled Access:		
Distance to: Sewer:		
Sewage Disposal		
<b>Construction: Material:</b>		
Type:		
ASME Rated?		
Shell Thickness:		
Head Thickness:		
Saddle Provided:		
Height top of walls above ground:		
Dimensions ( diameter, length x width)		
How pressurized?		
Maximum Water Pressure:		
Pressure relief valve provided:		
Pressure gauges provided?		
Level measurement provided?		
<b>Inlet &amp; Outlet Arrangement:</b>		
<u>Inlet:</u> Location:		
Distance above bottom:		
<u>Outlet:</u> Distance from inlet:		
Distance above bottom:		
Drain to where:		
Sewer or other hazardous connection (make sketch):		
Estimated maximum residence time		
<b>Relation to system:</b>		
Receives from:		
Delivers to:		
<b>Date of last tank coating &amp; material:</b>		
Interior Coating: Date/material		
Exterior Coating: Date/material		
<b>Tank Maintenance:</b>		
Date of last comprehensive inspection:		
Date of last cleaning/refurbishment:		
<b>Defects and Remarks:</b> (Include statements on cleaning practices, condition of structure, overflow condition, etc.)		

**STATE WATER RESOURCE CONTROL BOARD  
DIVISION OF DRINKING WATER**

**RESERVOIR DATA**

System Name: \_\_\_\_\_ System No.: \_\_\_\_\_  
 Source of Information: \_\_\_\_\_  
 Collected by: \_\_\_\_\_ Date: \_\_\_\_\_

<b>Number or Name:</b>		
Date constructed/refurbished:		
Purpose (storage, etc.):		
Capacity (Design and Operating):		
<b>Location (specific):</b>		
Cross-Street:		
Controlled Access:		
Lot Dimensions:		
Fencing:		
<b>Construction: Material:</b>		
Sides:		
Floor:		
Cover or roof:		
Type of Interior Coating:		
Height of tank walls above ground (ft):		
Dimensions (ft):		
Tank Bottom Elevation (ft):		
Surface drainage to res. possible?		
Ventilation:		
Screening:		
Cathodic Protection:		
<b>Inlet &amp; Outlet Arrangement:</b>		
<u>Inlet</u> Location:		
Distance above bottom:		
<u>Outlet</u> Distance from inlet:		
Distance above bottom:		
Drain to where:		
Drain distance above floor		
Overflow to where:		
Overflow height (ft):		
Estimated maximum residence time		
<b>Relation to system:</b>		
Inlet receives from:		
Outlet delivers to:		
Pressure Zone Served:		
<b>Tank Maintenance:</b>		
Date of last inspection:		
Date of last cleaning/refurbishment:		
Date of last tank coating & material:		
<b>Defects and Remarks:</b> (Include statements on cleaning practices, condition of structure, overflow condition, etc.)		

**RESERVOIR COATING DATA SHEET**  
(ATTACH MANUFACTURER'S COATING SPECIFICATIONS)

NAME OF UTILITY:

NAME AND LOCATION OF TANK:

AMOUNT OF STORAGE:

DIMMENSIONS OF TANK:

WAS THIS A NEW OR RECOATED TANK? NEW\_\_\_\_ RECOATED\_\_\_\_ FACTORY\_\_\_\_

OUTLINE THE SANDBLASTING PROCEDURE:

WAS COATING DONE BY THE UTILITY OR CONTRACTOR? IF CONTRACTOR, GIVE NAME ADDRESS, AND TELEPHONE NUMBER.

PLEASE FILL IN THE FOLLOWING TABLE:

COATINGS (in the order they were applied)	ONE	TWO	THREE
MANUFACTURER AND NAME OF COATING			
DATE APPLICATION STARTED DATE APPLICATION ENDED			
IS THE COATING CERTIFIED TO NSF/ANSI STANDARD 61?			
WAS COATING CUT WITH THINNER?			
TIME CURED BEFORE THE NEXT COATING WAS APPLIED (except final coat)			
DRY THICKNESS OF COAT			
TEMPERATURE AND RELATIVE HUMIDITY AT TIME OF COATING AND DURING THE CURING TIME			
CURING TIME OF THE FINAL COAT			
WAS CONTINUOUS FORCED AIR VENTILATION USED AFTER THE FINAL COAT IN ACCORDANCE WITH AWWA D102-03 OR MANUFACTURERS SPECIFICATIONS?			

TANK COATING DATA SHEET (Continued)

DRAW A CROSS-SECTIONAL DIAGRAM OF THE TANK SHOWING THE APPROXIMATE LOCATION OF THE ACCESS PORTS WHERE THE VENTILATION OCCURRED:

WAS THE WATER FROM THE TANK SAMPLED AFTER FILLING? YES\_\_\_\_ NO\_\_\_\_  
IF YES, INDICATE HOW LONG THE WATER WAS IN THE TANK BEFORE SAMPLING,  
WHAT ANALYSIS WERE PERFORMED, AND ATTACH THE RESULTS:

WHAT IS THE APPROXIMATE RETENTION TIME IN THE TANK?

**STATE WATER RESOURCES CONTROL BOARD**  
**WATER SUPPLY PERMIT**

**ENVIRONMENTAL INFORMATION FORM<sup>1</sup>**

*(To be completed by applicant – attach additional sheets as needed)*

**General Information**

1. Name of project: \_\_\_\_\_
2. Water System number: \_\_\_\_\_ ☐ New Permit ☐ Permit Amendment
3. Name of applicant or project sponsor: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ Zip: \_\_\_\_\_
4. Name of contact person for this project: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone Number: \_\_\_\_\_
5. Address of project: \_\_\_\_\_
6. Section, township, range, base and meridian: \_\_\_\_\_
7. Existing zoning at project site: \_\_\_\_\_
8. List and describe any other related permits and other public approvals required for this project, including those required by city, regional, state and federal agencies: \_\_\_\_\_  
\_\_\_\_\_
9. Does the project require a conditional use permit by a public agency?  
☐ yes ☐ no \_\_\_\_\_  
Does the project require a coastal permit by a commission or public agency?  
☐ yes ☐ no \_\_\_\_\_
10. Did a previous CEQA Document cover the project? ☐ yes ☐ no ☐ unknown
11. Is the site on or next to a designated scenic highway? ☐ yes ☐ no ☐ unknown  
If yes, give the name of the highway \_\_\_\_\_
12. Describe the existing system, if present (fill in blanks or provide attachment, e.g., application description)
  - a. Number of service connections: \_\_\_\_\_
  - b. Source information:
    - (1) Groundwater (well capacity): \_\_\_\_\_
    - (2) Surface water: \_\_\_\_\_
    - (3) Connections with other systems: \_\_\_\_\_
    - (4) Emergency connection: \_\_\_\_\_
  - c. Treatment: \_\_\_\_\_  
\_\_\_\_\_
  - d. Storage facilities
    - (1) Tanks (physical dimensions, capacity, and condition): \_\_\_\_\_

<sup>1</sup> Not for use with SDWSRF projects

(2) Open reservoirs (surface area, capacity, and condition): \_\_\_\_\_

e. Briefly describe how water is currently transmitted from the source(s) to the treatment facilities: \_\_\_\_\_

f. Briefly describe how finished water is currently transmitted from the treatment/storage facilities to consumers (distribution system): \_\_\_\_\_

g. Present amount of water delivered: \_\_\_\_\_ Current demand: \_\_\_\_\_

***Project Description*** (fill in blanks or provide attachment, e.g., application description)

1. Describe project objectives: \_\_\_\_\_

2. Project location (give description of the precise location and boundaries and attach topographic map and site plan): \_\_\_\_\_

3. Construction area: \_\_\_\_\_ acres. Additional service connections: \_\_\_\_\_

4. New source information:

a. Groundwater (well capacity): \_\_\_\_\_

b. Surface water: \_\_\_\_\_

c. Connections with other systems: \_\_\_\_\_

d. Emergency connection: \_\_\_\_\_

5. Facilities (indicate whether they are new, modifications, removals, or replacements.)

a. Treatment facilities (give size and capacities): \_\_\_\_\_



- \_\_\_\_\_
- \_\_\_\_\_
- b. Storage facilities
- (1) Tanks (physical dimensions and capacity): \_\_\_\_\_
- \_\_\_\_\_
- (2) Open reservoirs (surface area and capacity): \_\_\_\_\_
- \_\_\_\_\_
- c. Transmission facilities (give size of pumps, and length and diameter of pipelines - indicate if pipelines will be located entirely within right-of-ways): \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- d. Distribution facilities (give size of pumps, and diameter and length of mains – indicate if mains will be located entirely within right-of-ways): \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- e. Appurtenant structures: \_\_\_\_\_
- f. Parking facilities: \_\_\_\_\_
- g. Staging areas: \_\_\_\_\_
- \_\_\_\_\_
- h. Proposed lighting: \_\_\_\_\_
- \_\_\_\_\_
6. Will the project involve disposal of waste? ..... ☐ yes ☐ no ☐ unknown
- NOTE: Generation, handling, disposal and transport of spent filters for the removal of uranium and arsenic in drinking water may trigger additional regulatory licensing or permitting.
- a. If yes, identify the waste stream and describe handling and disposal: \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
7. Describe any grading or excavation work: \_\_\_\_\_

8. Will the project involve an increase in capacity to meet the demands of any new connections or development?.....☐ yes ☐ no ☐ unknown
- a. Amount of capacity increase: \_\_\_\_\_
- b. Needed to serve existing development?.....☐ yes ☐ no ☐ unknown
- c. Needed to serve projected development? .....☐ yes ☐ no ☐ unknown
- (1) Population basis for capacity determination (include year)
- (a) Current population: \_\_\_\_\_
- (b) Projected population: \_\_\_\_\_
9. If the project involves a variance, conditional use, or rezoning application, state this and indicate clearly why the application is required: \_\_\_\_\_
10. Proposed construction scheduling: \_\_\_\_\_

### ***Environmental Setting***

Include a discussion of all the following detailed elements as applicable; if an element is not present within the described area, give reasons or verify with investigative results. Consider all facilities; conveyance lines; storage, points of diversion; staging areas; and affected service area as applicable. Use attachments if necessary.

1. Topography and geology of the region
- a. Location of project area with regard to major topographical features: \_\_\_\_\_
- b. Elevations and slopes on project site (for grading / excavation activities): \_\_\_\_\_
- c. Attach any soil or geologic reports available for the site
2. Land use
- a. At project site: \_\_\_\_\_
- b. Adjacent to project site: \_\_\_\_\_
- c. Along pipeline alignments: \_\_\_\_\_
- d. At the point of diversion: \_\_\_\_\_
3. Vegetation types
- |                       | On Project Site          | Surrounding Area         |
|-----------------------|--------------------------|--------------------------|
| Urbanized             | <input type="checkbox"/> | <input type="checkbox"/> |
| Landscaped            | <input type="checkbox"/> | <input type="checkbox"/> |
| Ruderal (Weedy)       | <input type="checkbox"/> | <input type="checkbox"/> |
| Grassland             | <input type="checkbox"/> | <input type="checkbox"/> |
| Shrub/Chaparral       | <input type="checkbox"/> | <input type="checkbox"/> |
| Woodland              | <input type="checkbox"/> | <input type="checkbox"/> |
| Forest                | <input type="checkbox"/> | <input type="checkbox"/> |
| Riparian (Streamside) | <input type="checkbox"/> | <input type="checkbox"/> |

Wetland

☐☐

- a. General Description of vegetation: \_\_\_\_\_  
\_\_\_\_\_
- b. Native Trees (number and type on project site): \_\_\_\_\_  
\_\_\_\_\_
- c. Graded area(% of project area): \_\_\_\_\_
4. Fish and wildlife (project site and surrounding area)
- a. Dominant species: \_\_\_\_\_  
\_\_\_\_\_
- b. Economically or recreationally significant species: \_\_\_\_\_  
\_\_\_\_\_
5. Surface water features (project site and surround area)
- a. Lakes: \_\_\_\_\_
- b. Streams: \_\_\_\_\_
- c. Estuaries: \_\_\_\_\_
- d. Potential wetlands: \_\_\_\_\_
- e. Lagoons, marshes and other water features: \_\_\_\_\_
- f. Is the project near a Wild and Scenic River? ☐ yes ☐ no ☐ unknown
6. Agricultural land on project site (acres): \_\_\_\_\_
- a. Will the project convert prime farmland, unique farmland, or farmland of statewide importance? ☐ yes ☐ no ☐ unknown
7. Is the project site included on a list of hazardous material sites compiled pursuant to Government Code 65962.5? ☐ yes ☐ no ☐ unknown
8. Is the project located near an airstrip? ☐ yes ☐ no ☐ unknown
- a. Is the airstrip ☐ public ☐ private ☐ unkn
- b. Does it have lights for night use? ☐ yes ☐ no ☐ unknown
- c. Does it have a buffer zone, a safety plan, a land use plan or some other document that indicates how it will avoid land use conflicts with surrounding properties? ☐ yes ☐ no ☐ unknown
- d. Is any part of the project in the path of planes taking off or landing? ☐ yes ☐ no ☐ unknown  
If so, what are the new safety risks posed by that part of the project? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
9. Historic and prehistoric archeological sites, architecture, landscapes, features, structures, or objects: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
10. Traditional cultural places (e.g. sacred lands): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. Lands within the coastal zone jurisdiction? ..... ☐ yes ☐ no ☐ unknown  
 12. Lands within a floodplain? ..... ☐ yes ☐ no ☐ unknown

### ***Environmental Impacts***

Are the following items known to be applicable to the project or its effects? Discuss below all items checked yes (attach additional sheets as necessary).

- |     | Yes                      | No                       |  |
|-----|--------------------------|--------------------------|--|
| 1.  | <input type="checkbox"/> | <input type="checkbox"/> | Removal of mature native/heritage trees.   |
| 2.  | <input type="checkbox"/> | <input type="checkbox"/> | Clearing of native vegetation and/or habitat.  |
| 3.  | <input type="checkbox"/> | <input type="checkbox"/> | Interference with or blocking wildlife migration routes.   |
| 4.  | <input type="checkbox"/> | <input type="checkbox"/> | Effect on a special status species.  |
| 5.  | <input type="checkbox"/> | <input type="checkbox"/> | Interference with or substantial use of recreational facilities.   |
| 6.  | <input type="checkbox"/> | <input type="checkbox"/> | Change in ocean, bay, lake, or stream water quality or quantity.   |
| 7.  | <input type="checkbox"/> | <input type="checkbox"/> | Alteration of existing drainage patterns.  |
| 8.  | <input type="checkbox"/> | <input type="checkbox"/> | Change in existing features of any bays, tidelands, beaches, or hills, or substantial alteration of ground contours. |
| 9.  | <input type="checkbox"/> | <input type="checkbox"/> | Substantial depletion of groundwater supplies.   |
| 10. | <input type="checkbox"/> | <input type="checkbox"/> | Change in groundwater quality.   |
| 11. | <input type="checkbox"/> | <input type="checkbox"/> | Loss of mineral resources.   |
| 12. | <input type="checkbox"/> | <input type="checkbox"/> | Change in scenic views or vistas from existing residential areas, or public lands or roads.                          |
| 13. | <input type="checkbox"/> | <input type="checkbox"/> | Change in pattern, scale or character of the general project area.   |
| 14. | <input type="checkbox"/> | <input type="checkbox"/> | Significant amounts of solid waste or litter.  |
| 15. | <input type="checkbox"/> | <input type="checkbox"/> | Change in dust, ash, smoke, fumes, or odors in the vicinity.   |
| 16. | <input type="checkbox"/> | <input type="checkbox"/> | Substantial change in noise or vibration levels in the vicinity (beyond the property line).                          |
| 17. | <input type="checkbox"/> | <input type="checkbox"/> | Site on filled land or on slopes of 10 percent or more.  |
| 18. | <input type="checkbox"/> | <input type="checkbox"/> | Use or disposal of hazardous materials, flammables, or explosives.   |
| 19. | <input type="checkbox"/> | <input type="checkbox"/> | Substantial change in demand for municipal services.   |
| 20. | <input type="checkbox"/> | <input type="checkbox"/> | Substantial increase in traffic.   |
| 21. | <input type="checkbox"/> | <input type="checkbox"/> | Substantial increase in fuel consumption (electricity, oil, natural gas, etc.).                                      |
| 22. | <input type="checkbox"/> | <input type="checkbox"/> | Related to a larger project or series of projects.   |

Discussion: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Describe any known potentially significant environmental effects that may result if the project is implemented (attach additional sheets as necessary):

Describe any mitigation measures that will be incorporated into the project to avoid or reduce to less-than-significant any impacts described above (attach additional sheets as necessary):

**Certification** I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signature: \_\_\_\_\_

Date \_\_\_\_\_

Name: \_\_\_\_\_

Position: \_\_\_\_\_



**State Water Resources Control Board**  
**TMF Assessment Form**

ASSESSMENT TYPE:    ☐ Financing Project    ☐ New System    ☐ Change of Ownership

WATER SYSTEM CLASSIFICATION:    ☐ Community Water System  
  ☐ Nontransient Noncommunity Water System  
  ☐ Transient Noncommunity (TNC) Water System  
  You may be eligible to use the TNC EZ Form

**A. WATER SYSTEM INFORMATION**

Water System Name:
Water System Number: CA _____
Water System Physical Address: _____ _____
City: _____ Zip: _____
County: _____
Division of Drinking Water Office or Local Primacy Agency: _____

**B. PERSON COMPLETING THIS TMF ASSESSMENT (\*Required fields)**

*Name:	*Signature:
*Title :	*Date Assessment Completed:
*Phone Number:	Email Address:
*Company Name and Address: _____ _____	
City: _____ Zip: _____	

**C. MAIN WATER SYSTEM CONTACT PERSON INFORMATION** (To be completed only if it's different from B. above)

Name:	Title:
Phone Number:	Email Address:
Water System Mailing Address: _____ _____	
City: _____ Zip: _____	

## TMF Assessment Instructions

In California the technical, managerial, and financial (TMF) assessment must be completed by public water systems that are applicants for State Water Resources Control Board (SWRCB) funding programs, new water systems, and changes of water system ownership.

To complete this assessment refer to the guidance and explanations in the Criteria For TMF Assessment document located on the SWRCB web site at:

[http://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/TMF.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/TMF.shtml)

If requested information has already been submitted directly to the SWRCB division of drinking water office or the LPA, note the location of that information on the assessment form in the comments space. Required documentation may be submitted electronically on a compact disk (if submission is electronic indicate on assessment).

For each TMF element described below place the required information in the appendix and identify it by an attachment number that corresponds to the TMF element number. For example, documentation required for element number seven, Water Rights, should be identified in the appendix as Attachment 7, Water Rights. In addition, in the comments section of each TMF element list the actual documents that are provided in the appendix. For example, under the Water Rights comments section indicate that in the appendix Attachment 7 contains copies of the deeds to Wells 1 and 2 and the State Water Resources Control Board surface water. Check all boxes that are applicable. If the item is not applicable check the NA box to show that these items have been considered.

## TMF Elements

### 1. Consolidation Feasibility

[Funding Projects, New Systems, Change of Ownership - **Mandatory**]

Each public water system applying for construction funding or a refinancing loan must perform an evaluation, including costs and feasibility, of physically consolidating with another public water system. Guidelines for when a consolidation is most feasible include, but are not limited to:

- when one of the water systems is located within another's established service area,
- when one of the water systems is within an existing General Plan's zone of influence of the other,
- Or when the water system is within five miles of another public water system.

If the water system applying for construction funding or a refinancing loan is a "small community water system" (which is defined as: a community water system that serves no more than 3,300 service connections or a yearlong population of no more than 10,000 persons) and the water system is considered "disadvantaged" (which is defined as: the entire service of area of a community water system, or a community therein, in which the median household income is less than 80 percent of the statewide average), consolidation is *highly*

*encouraged* and the water system may be allowed funding for a consolidation feasibility study and/or may be giving priority when seeking construction funding.

- ☐ List all large water systems and the number of connections that are within five miles of the system.  
Record NA if there is no water system in the vicinity. ☐ NA

- ☐ Submit a consolidation assessment that includes the name of all water systems contacted, and the results of any consolidation discussions conducted with at least one system within the five mile radius. ☐ NA

Comments \_\_\_\_\_  
\_\_\_\_\_

## 2. System Description

[Funding Projects - **Necessary**; New Systems and Change of Ownership - **Mandatory**]

Provide a system map that illustrates the location of all of the components of the water system including the:

- |   |                             |
|---|-----------------------------|
| <input type="checkbox"/> Current service area boundary        | <input type="checkbox"/> NA |
| <input type="checkbox"/> Sources                              | <input type="checkbox"/> NA |
| <input type="checkbox"/> Treatment facilities                 | <input type="checkbox"/> NA |
| <input type="checkbox"/> Pumping stations                     | <input type="checkbox"/> NA |
| <input type="checkbox"/> Pressure zones                       | <input type="checkbox"/> NA |
| <input type="checkbox"/> Storage tanks                        | <input type="checkbox"/> NA |
| <input type="checkbox"/> Potential contamination hazards      | <input type="checkbox"/> NA |
| <input type="checkbox"/> Projected ten-year growth boundaries | <input type="checkbox"/> NA |

Comments \_\_\_\_\_  
\_\_\_\_\_

## 3. Certified Operators

[Funding Projects - **Necessary**; New Systems and Changes of Ownership - **Mandatory**]

The regulating agency has determined that this water system needs a:

- |   |                             |
|---|-----------------------------|
| <input type="checkbox"/> Certified distribution operator, Grade _____ | <input type="checkbox"/> NA |
| <input type="checkbox"/> Certified treatment operator, Grade _____    | <input type="checkbox"/> NA |
- ☐ Provide copies of current certificates with operator names and grades as documentation that the distribution and treatment operators are certified for the appropriate level that is required for the water system.

- ☐ For a contract certified operator, provide a copy of the contract that describes the: ☐ NA
- Level of certification that the operator will be required to maintain
  - Specific duties for which the operator will be responsible
  - Time to be spent serving the water system
  - Procedures to follow for complaints, compliance discrepancies, and emergencies

Comments \_\_\_\_\_

---

#### 4. Source Capacity

[Funding Projects - **Necessary**; New Systems and Changes of Ownership - **Mandatory**]

At all times a water system must have the capacity to meet the system's maximum day demand and to ensure that it has suitably adequate sources of water supply to serve the needs of its constituents in the future. Develop and submit the following:

- ☐ Documentation which demonstrates that the water system has a sufficient water supply as described in California Code of Regulations, Section 64554.
- ☐ A water conservation plan to address potential drought conditions.
- ☐ A plan to install water meters on all connections as well as a master meter on each source in order to accurately measure water consumption. [Note that all water systems applying for SWRCB funds must consider the feasibility of installing meters at each service connection that lacks a meter. Additionally, the funding requirements for the project must include conditions that the system will incorporate provisions into its operating procedures and expenses to read the meters and to charge rates based on usage.
- ☐ N/A – System is metered
- ☐ A map of the existing service area and surrounding locations that includes the location of all water sources as well as sources of potential contamination such as waste disposal sites, landfills, feedlots, underground storage tanks, out-of-service wells, and other potential contaminants.
- ☐ Documentation that demonstrates the water sources are protected from vandalism, tampering, contamination, or other threats.
- ☐ Ten year potential growth plans consistent with local land use plans and projected water demand. Describe how the system will ensure that potential water sources will meet all water quality standards.
- ☐ A plan to start the process to obtain additional water rights for new water sources if needed. ☐ NA

Comments \_\_\_\_\_



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## 5. Operations Plan

[Funding Projects-**Necessary**; New Systems and Changes of Ownership- **Mandatory**]

This operations plan describes all of the activities needed to maintain the water system in compliance with all drinking water standards. This plan describes the daily, weekly, monthly, and yearly tasks that would enable another qualified operator to assume the operation of the water system in an emergency. The plan also describes non-routine activities such as positive analytical results, responses to complaints, emergency operational practices, record keeping, and other duties. The operations plan will be updated as needed whenever changes occur. The date of the latest operations plan review was \_\_\_\_\_.

Provide an operations plan that describes the tasks that would enable another qualified operator to assume the operation of the system in an emergency. Include tasks that will be completed:

- ☐ Daily
- ☐ Weekly
- ☐ Monthly
- ☐ Yearly

Include non-routine activities relating to:

- ☐ Positive analytical results
- ☐ Complaints
- ☐ Emergency operational practices
- ☐ Record keeping
- ☐ Other duties

Templates for a number of sample operations plan can be found on the SWRCB web site at:

[http://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/TMF.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/TMF.shtml)

Comments \_\_\_\_\_

---

## 6. Training

[Funding Projects, New Systems, and Changes of Ownership - **Necessary**]

Submit a plan describing the training that will be provided to ensure that everyone associated with the water system has the knowledge to competently comply with existing requirements and to be informed about new compliance requirements, new technologies, and newly identified hazards. The plan needs to describe the training for the following:



- ☐ Certified operators: Contact hours needed to maintain operator certification at the required grade for the system and other related training.
- ☐ Governing board and managers: Training that covers board and management roles and responsibilities including ethics and financial management.
- ☐ Other staff: Pertinent training to enable all staff to competently perform activities necessary to the operation and maintenance of the system.

Comments \_\_\_\_\_

---

## 7. Ownership

[Funding Projects; New Systems, and Changes of Ownership - **Mandatory**]

Ownership must be clearly identified for all components of the water system. Check the type of water system ownership:

- ☐ Sole proprietorship
- ☐ Partnership
- ☐ Corporation
- ☐ Mutual
- ☐ Governmental agency
- ☐ Other formation type

A copy of the deed for any well locations may document both ownership and water rights. Provide the following ownership documentation as hard copies or in electronic format:

- ☐ Formation papers such as incorporation articles, partnership documentation, by-laws, and governing ordinances. ☐ NA
- ☐ Deeds and other ownership documentation of all system property including land, buildings, wells, storage tanks, treatment facilities, and other system components. ☐ NA
- ☐ Easements, leases, or agreements for long term use regarding land or system components that are not owned by the water system. Specify the duration of the authorization. ☐ NA
- ☐ Encumbrances, trust indentures, bankruptcies, decrees, legal orders, or other items that may affect the owner's control of the water system. ☐ NA
- ☐ If the water system is under temporary ownership such as a developer, describe the timing for the change in ownership and the contact information for the eventual owner. ☐ NA
- ☐ If the owner of the water system has owned or managed any other public water system within the last ten years, list these systems by name and number. ☐ NA

- ☐ For a sole proprietor submit a plan that describes how the system will continue to be operated in the event the owner becomes incapable of carrying out this responsibility. ☐ NA

Comments \_\_\_\_\_  
\_\_\_\_\_

## 8. **Water Rights**

[Funding Projects; New Systems, and Changes of Ownership - **Mandatory**]

Provide the following documentation as hard copies or electronic format:

- ☐ List the current and emergency water sources that will be used to operate the system including groundwater, surface water, purchased water, and any other sources.  
\_\_\_\_\_
- ☐ Describe the long-term availability of the sources used by the water system to meet a projected 10-year water demand. \_\_\_\_\_  
\_\_\_\_\_

Groundwater: ☐ Yes ☐ No

- Unadjudicated Basin: Provide the following: ☐ NA
  - ☐ A statement that the groundwater is extracted from a basin that is not adjudicated.
  - ☐ Copies of the deeds for the parcels of each unadjudicated groundwater source used by the system.
- Adjudicated Basin: Attach the deed for the parcels of each adjudicated groundwater source that notes the adjudication or provide documentation of the Basin Water Master's terms of the adjudication as they relate to the water system's right to extract water from the adjudicated basin. ☐ NA

Surface Water: ☐ Yes ☐ No

Circle the type of water rights the water system holds for surface water from the list below:

- a. Appropriative
  - 1) Pre-1914
  - 2) State Water Resources Control Board (SWRCB) Permit or License
- b. Riparian

Appropriative

- ☐ If Pre-1914, provide a statement that water rights were established prior to 1914. ☐ NA
- ☐ If after 1914, provide a copy of the SWRCB water rights permit or license. Note that an application to the SWRCB does not document water rights. ☐ NA

Riparian

- ☐ Provide a statement that water is derived from a surface source pursuant to a riparian right. ☐ NA

Purchased Water: ☐ Yes ☐ No

- ☐ Provide a copy of the water service agreement for purchased water that specifies the duration of the authorization. Note that for funding projects the long term use agreements must extend for the life of the loan or a minimum of 20 years for grant funded projects. ☐ NA

Comments \_\_\_\_\_  
\_\_\_\_\_

**9. Organization**

[Funding Projects – **Necessary**; New Systems, and Changes of Ownership - **Mandatory**]

In order to establish the lines of authority and communication between employees and management including the governing board, managers, certified operators, and clerical staff, provide a:

- ☐ Structural organizational chart for positions associated with the water system that indicates the lines of authority. Specify the frequency of board meetings where appropriate.
- ☐ Separate chart that lists the names and phone numbers of the specific people who fill those positions. Update this information as needed.
- ☐ List on the organization charts information on any contract certified operators the system may utilize. Indicate the level of certification and the number of hours for which the services of a certified operator are contracted. ☐ NA

Comments \_\_\_\_\_  
\_\_\_\_\_

**10. Emergency Response Plan**

[Funding Projects – **Necessary**; New Systems, and Changes of Ownership - **Mandatory**]

A sample emergency response plan template is located on the CDPH website at:

[http://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/TMF.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/TMF.shtml)

Ensure that the emergency response plan for the water system includes:

- ☐ A list of all disasters and emergencies that is likely to occur in the water system's service area. Include earthquakes, fires, and disinfection failure at minimum as well as flooding, water outages, water contamination, power outages, and other potential local emergencies.
- ☐ The names and contact information of water system personnel including the decision makers. Identify responsibilities, and provide a clear chain of command.
- ☐ An inventory of system resources used for normal operations and available for emergencies including maps and schematic diagrams, lists of emergency equipment and suppliers, emergency contract agreements, and emergency water interconnections or sources.
- ☐ A communication network that describes a designated location for an emergency operations center, emergency contact information for equipment suppliers, emergency phone and radio communication capabilities, coordination procedures with governmental agencies for health and safety protection, technical and financial assistance, and public notification procedures.
- ☐ Emergency procedures to quickly assess damage to water system facilities including logistics for emergency source activation and repairs, procedures for monitoring progress of repairs and restoration, and procedures for documenting damage and repairs.
- ☐ Describe steps that will be taken to resume normal operations and to submit reports to appropriate agencies.

Comments \_\_\_\_\_  
\_\_\_\_\_

## 11. Policies

[Funding Projects; New Systems, and Changes of Ownership - **Necessary**]

- ☐ A policy manual has been adopted that describes procedures pertinent to the management of the water system. At a minimum the policies described should cover:
  - a. Nonpayment of water charges
  - b. Unauthorized use of water
  - c. Hours worked and overtime
  - d. Complaint responses
  - e. Contract operators, if applicable
  - f. Governing board activities such as regulatory responsibilities, expenditure allowances, meeting notifications, resolution adoptions, and other issues as applicable



Comments \_\_\_\_\_

## 12. Budget Projection / Capital Improvement Plan

[Funding Projects; New Systems, and Changes of Ownership - **Mandatory**]

Use the sample 5-year budget projection/capital improvement plan (CIP) template, or an equivalent alternative, that is located on the CDPH website at

[http://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/TMF.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/TMF.shtml)

This file consists of guidelines for completing this spreadsheet on the first Excel tab, the 5-year budget projection on the second tab, and the CIP on the third tab.

Submit the following:

- ☐ 5-Year budget projection/CIP template
- ☐ Documentation that reserve funds have been created for the CIP, operations and maintenance expenses, potential emergency needs, and any other reserve accounts necessary for the management of the system.
- ☐ Documentation of the current rate structure. ☐ NA
- ☐ Documentation of the average annual cost of water per connection for the last calendar year. ☐ NA
- ☐ Documentation that revenues cover expenses including the CIP reserve, or describe the plan to increase revenues to cover these expenditures? ☐ NA
- ☐ Where appropriate, include the Proposition 218 voter approval process that will be followed if a rate increase is planned. ☐ NA
- ☐ For investor owned systems documentation from the California Public Utilities Commission of an approved budget, CIP, and rate schedule. ☐ NA
- ☐ NEW SYSTEMS OR FUNDING PROJECTS ONLY: Proposed rate structure. ☐ NA
- ☐ NEW SYSTEMS OR FUNDING PROJECTS ONLY: Estimated average annual cost of water per connection based on the proposed new funding amount. ☐ NA

Comments \_\_\_\_\_



### 13. Budget Control

[Funding Projects - **Necessary**; New Systems, and Changes of Ownership - **Mandatory**]

A financial policy that includes:

- ☐ Budget control procedures in which one person records a transaction and a manager review and approves it. Describe budget controls for:
  - a. Cash receipts and disbursements
  - b. Bank accounts
  - c. Payroll
- ☐ Financial reports prepared for review by governing board such as:
  - a. Customer Receivables Report
  - b. Check Register Review
  - c. Bank Reconciliation Report
  - d. Budget Comparison Report
  - e. Quarterly Comparative Balance Sheet
  - f. Tax Returns
- ☐ Criteria and withdrawal guidelines for the maintenance of reserve accounts including:
  - a. CIP Reserve
  - b. Operations and Maintenance Reserve
  - c. Contingency or Emergency Reserve
  - d. Other Reserves
- ☐ Reporting procedures to appropriate levels of authority to ensure that there is no commingling of revenue sources. ☐ NA
- ☐ Periodic reviews of the budget status by a Certified Public Accountant or appropriately qualified financial officer of the water system to ensure continuing financial viability. Three years of the most current audited financial reports must be submitted for all CDPH funding projects. ☐ NA

Comments \_\_\_\_\_  
\_\_\_\_\_

## Appendix 2 – Notification of Receipt

**Citation Number:** 05-13-19C-001

**Name of Water System:** Sierra Business Park Owner's Association

**System Number:** 2600700

### Certification

I certify that I am an authorized representative of the Sierra Business Park Owner's Association and that Citation No. 05-13-19C-001 was received on \_\_\_\_\_. Further I certify that the Citation has been reviewed by the appropriate management staff of the Sierra Business Park Owner's Association and it is clearly understood that Citation No. 05-13-19C-001 contains legally enforceable directives with specific due dates.

\_\_\_\_\_  
Signature of Water System Representative

\_\_\_\_\_  
Date

<p><b>THIS FORM MUST BE COMPLETED AND RETURNED TO THE STATE WATER BOARD, DIVISION OF DRINKING WATER, NO LATER THAN JANUARY 31, 2019</b></p>
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**Disclosure:** Be advised that the California Health and Safety Code, Sections 116725 and 116730 state that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance with the Safe Drinking Water Act may be liable for, respectively, a civil penalty not to exceed five thousand dollars (\$5,000) for each separate violation or, for continuing violations, for each day that violation continues, or be punished by a fine of not more than \$25,000 for each day of violation, or by imprisonment in the county jail not to exceed one year, or by both the fine and imprisonment.